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EXAMINER	
RIOUX, JAMES A	
ART UNIT	**PAPER NUMBER**
3694	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/079,022	CHARNLEY, JAMES ALLEN	
	Examiner	Art Unit	
	James Rioux	3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *09 December 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 December 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/17/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *90-C Communication*.

DETAILED ACTION

1. Claims 1 through 33 have been examined in the patent application numbered 10/079,022 by Charnley (hereinafter referred to as the Application).

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. Please list all of the patents mentioned in the specification in the information disclosure statement.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "areas 50" referred to in the specification on page 25, paragraph 91 and as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be

removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: 1.) the specification is missing a "Brief Description of Drawings," 2.) page 15, paragraph 58 should start with the last line, i.e. "Illustrated in Fig. 15 is," 3.) page 21, paragraph 81 refers to "areas 50" which is not labeled in the drawings, 4.) NAV is an undefined term used in the specification, i.e. please define NAV .

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. The general rule for "Undue Experimentation" is if the factors indicate undue experimentation is required for the use of the invention by considering the a.)breadth of the claims, b.)nature of the invention, c.)state of the prior art, d.) level of one of ordinary skill, e.) the level of predictability in the art, f.) amount of direction provided by the inventor, and g.) the quantity of experimentation needed to use the invention then the claimed invention will be unpatentable. In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988).

6. Here, the breadth of the claims factor is satisfied because the claim language in the application appears to be so broad as to read on work of Harry Markowitz and his Nobel Prize winning work which was admitted by the inventor to be the basis of his work in his Schedule F of Form ADF on page 2. See James Charnley, Schedule F of Form ADV, 06/16/06.

7. Here, the nature of the invention factor is satisfied because, as stated by the Professors of Finance Roenfeldt and Cooley, "capital budgeting procedures R/V ratios represent aids to managerial judgment....[m]anagement must ultimately make the decisions. The inventor even admits on page 25 of the specification of the "trial-and-error" method used in his invention to determine the scale which is integral to his invention.

8. Here, the state of the prior art factor is satisfied because the art of investing with consideration or risk and return as shown by Figs. 1 – 11 in the application all show that the methodology of utilizing risk-return plots to make investment decisions was and continues to be widely used and understood.

9. Here, the level of one of ordinary skill is satisfied because a typical broker will not be familiar with the post-doctoral level comparative statistics application to investment decisions. For example, the inventor suggests the use of "multivariate density estimation, cluster analysis, nearest-neighbor analysis and point-pattern analysis" on page 29, paragraph 103 of the specification which are typically covered only in graduate statistics courses. See University of Florida Department of Statistics, UF/Statistics Graduated Curriculum and Courses, (visited Mar. 3, 2007) ,http://www.stat.ufl.edu/academics/grad/grad_courses.shtml> (for proof of the suggested methods being beyond the ordinary skill in the art.)

10. Here, the level of predictability in the art is satisfied because the stock market continues to undergo dramatic change as the world changes. Here, the level of amount of direction provided by the inventor is satisfied because the inventor on page 29 through 30 of the specification provides various other techniques to achieve the desired results such as "multivariate density estimation, cluster analysis, nearest-neighbor analysis and point-pattern analysis." Furthermore, the inventor admits on page 30, paragraph 103 that this invention can be "combined with other selection techniques," which indicates that the selection methodology has not yet been proven or perfected.

11. Here, the level of quantity of experimentation needed to use the invention is satisfied because, as shown in Figs. 14a through h, the segmentation of the distribution has not yet been determined and the distribution must be segmented according to all of the combination shown in Figs. 14 a through h. Furthermore, the inventor suggests the "optional" steps on page 27, paragraph 98 of the specification of eliminating smaller

funds and investing where the funds as most concentrated yet claims these optional steps as dependent claims.

12. Therefore, the invention requires undue experimentation because all of the factors of In re Wands have been satisfied, the method of investing has not yet been perfected, and experimentation is required to achieve the desired investing results. In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as obvious over Lear with the patent number 6,912,509 B1 (hereinafter Lear) in view of the non-patent literature provided by Schrage (hereinafter Schrage). Linus Schrage, Optimization Applications in Finance, 05/02/1999, p 1-6.

14. Here, **as to claim 1**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose selecting the group for investment based on variances in the population distribution from that of a normal distribution of said past investment performance around the mid-point of investment performance for the population as proposed in the Application. On the other hand, Schrage teaches or discloses that selecting the group for investment based on variances. See Schrage, page 4.

The prior art of Lear and Schrage are "analogous" or "pertinent" because both Lear and Schrage are in the same field of endeavor as the patent application because Lear and Schrage are in the field of portfolio selection.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lear to include a variance analysis in view of Schrage because variance is just the square of the standard deviation and stills allows consideration of risk since there is a need to incorporate risk in the evaluation of any investment decision as stated by Roenfeldt. See Roenfeldt and Cooley, Ranking Investments by Risk and Return, July-August 1977, Atlanta Economic Review, page 14 and Jay L. Devore, Probability and Statistics for Engineering and the Sciences, Brooks/Cole Publishing Company, 3re ed., p. 141-2 (for mathematical definition of standard deviation and variance). It would have been obvious to one skilled in the art to use the alternative measure of risk, i.e. variance rather than standard deviation, in the system of Lear because Lear would need or want the alternate descriptor of risk.

15. Here, **as to claim 2**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. Lear also teaches or discloses selecting the group for investment based on risk in the population distribution from that of a normal distribution of said past investment performance around the mid-point of investment performance for the population as proposed in the Application. Lear; Column 6, Line 9 and Column 3, Line 63. On the other hand, Schrage teaches or discloses that selecting the group for investment based on variances. See Schrage, page 4. See claim 1 for motivation analysis because claim 2 is rejected under the same rationale as claim 1 described above.

16. Claims 3, 11, and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Lear and Schrage as applied to claims 1 and 2 above, and further in view of admissions by the inventor James Charnley from his Application and his website's exposition of his Schedule F of Form ADV (hereinafter Charnley). See James Charnley, Schedule F of Form ADV, 06/16/06, p. 8-9.

17. Here, **as to claim 3**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose selecting the group for investment based on variances in the population distribution from that of a normal distribution of said past investment performance around the mid-point of investment performance for the population as proposed in the Application. On the other hand, Schrage teaches or

discloses that selecting the group for investment based on variances. See Schrage, page 4.

However, neither Lear nor Schrage teaches or discloses sectioning said population distribution into equal-sized population portions as proposed in the Application. On the other hand, Charnley teaches or discloses that the sectioning said population distribution into equal-sized population portions was attributable to prior art as indicated in Fig. 8 – 11 and in the Specification on page 18, paragraph 71.

The prior art of Lear, Schrage and Charnley are "analogous" or "pertinent" because Lear, Schrage and Charnley are in the same field of endeavor as the patent application because Lear, Schrage and Charnley are in the field of portfolio selection.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lear and Schrage to include a sectioning the risk-return graphs in view of Charnley because Charnley indicates he adopted the sectioning technique from others with the label "prior art" since the need visualize the factors of risk and return is part of the prior art. See Application Specification Page 18, Paragraph 71 and Figures 8 – 11. It would have been obvious to one skilled in the art to use the improved visualization in the prior art to refine in the system of Lear because an analyst would need or want the feature of greater detail in visualization.

18. Here, **as to claim 11**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose selecting the group for investment based on variances in the population distribution from that of a normal distribution of

said past investment performance around the mid-point of investment performance for the population as proposed in the Application. On the other hand, Schrage teaches or discloses that selecting the group for investment based on variances. See Schrage, page 4.

However, neither Lear nor Schrage teaches or discloses eliminating from said group of funds selected for investment those funds that have a front-end sales charge, deferred sales charge, or redemption fee as proposed in the Application. On the other hand, Charnley teaches or discloses that eliminating from said group of funds was attributable to prior art as indicated in Schedule F of Form ADV on pages 8 – 9 (specifically referring to Benjamin Graham as the source of these techniques).

The prior art of Lear, Schrage and Charnley are "analogous" or "pertinent" because Lear, Schrage and Charnley are in the same field of endeavor as the patent application because Lear, Schrage and Charnley are in the field of portfolio selection.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lear and Schrage to eliminate from groups of funds with fees or charges in view of Charnley's admissions because Charnley indicates he adopted the elimination of those funds from Graham. See James Charnley, Schedule F of Form ADV, 06/16/06, p. 8-9. It was obvious to one skilled in the art, such as Charnley, to use the elimination of unprofitable groups from the system of Lear because an analyst would need or want to reduce unnecessary costs.

19. Here, **as to claim 12**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4,

Line 35. However, Lear does not teach or disclose selecting the group for investment based on variances in the population distribution from that of a normal distribution of said past investment performance around the mid-point of investment performance for the population as proposed in the Application. On the other hand, Schrage teaches or discloses that selecting the group for investment based on variances. See Schrage, page 4.

However, neither Lear nor Schrage teaches or discloses eliminating from said group of funds selected for investment those funds whose net asset value is less than 1% of the net asset value of the largest funds in said population, i.e. the smaller funds, as proposed in the Application. On the other hand, Charnley teaches or discloses that eliminating from said group of funds those that are smaller funds was attributable to prior art as indicated in Schedule F of Form ADV on pages 8 – 9 (specifically referring to Benjamin Graham as the source of this technique). See claim 11 for motivation analysis because claim 12 is rejected under the same rationale as claim 11 described above.

20. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Lear, Schrage, Charnley, as applied to claims 3, 11 and 12 above, and further in view of the non-patent literature Probability and Statistics for Engineering and the Sciences by Devore (hereinafter Devore). See Jay L. Devore, Probability and Statistics for Engineering and the Sciences, Brooks/Cole Publishing Company, 3re ed., p. 141-2 and 257-263.

21. Here, **as to claim 4**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4,

Line 35. However, Lear does not teach or disclose selecting the group for investment based on variances in the population distribution from that of a normal distribution of said past investment performance around the mid-point of investment performance for the population as proposed in the Application. On the other hand, Schrage teaches or discloses that selecting the group for investment based on variances. See Schrage, page 4.

However, neither Lear nor Schrage teaches or discloses sectioning said population distribution into equal-sized population portions as proposed in the Application. On the other hand, Devore teaches or discloses said step of sectioning of said population distribution into said equal-sized population portions is by drawing a dividing line at 0.675 standard deviations from a center point of investment risk, and then drawing another dividing line, also at 0.675 standard deviations, from the center of said average returns for each said portion of the population.

The prior art of Lear, Schrage and Charnley are "analogous" or "pertinent" because Lear, Schrage and Charnley are in the same field of endeavor as the patent application because Lear, Schrage and Charnley are also in the field of statistics applied to portfolio selection.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lear and Schrage to include a division of the population under the bell curve into quarters in view of Devore because Devore teaches the statistic technique of dividing up populations in any number of groups since the need analyze different sets of the population is a standard statistical method. See Jay L.

Devore, Probability and Statistics for Engineering and the Sciences, Brooks/Cole Publishing Company, 3re ed., p. 257-263. It would have been obvious to one skilled in the art to use standard statistical techniques to adapt the system of Lear because an analyst would need or want the standard tools used in statistics.

22. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as obvious over Lear and Schrage, and further in view of Devore.

23. Here, **as to claim 5**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose selecting the group for investment based on variances in the population distribution from that of a normal distribution of said past investment performance around the mid-point of investment performance for the population as proposed in the Application. On the other hand, Schrage teaches or discloses that selecting the group for investment based on variances. See Schrage, page 4.

However, neither Lear nor Schrage teaches or discloses said past performance is calculated for a number of periods adequate for generating a valid measure of returns variance as proposed in the Application. On the other hand, Devore teaches or discloses choosing an adequate sample size for all statistical analysis. See Jay L. Devore, Probability and Statistics for Engineering and the Sciences, Brooks/Cole Publishing Company, 3re ed., p. 262-3, and p. 334-5. See claim 4 for motivation analysis above because claim 5 is rejected under the same rationale as claim 4 described above.

24. Here, **as to claim 6**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose selecting the group for investment based on variances in the population distribution from that of a normal distribution of said past investment performance around the mid-point of investment performance for the population as proposed in the Application. On the other hand, Schrage teaches or discloses that selecting the group for investment based on variances. See Schrage, page 4.

However, neither Lear nor Schrage teaches or discloses wherein said past performance is determined for a period of at least the five preceding years as proposed in the Application. On the other hand, Devore teaches or discloses choosing an adequate sample size for all statistical analysis. Jay L. Devore, Probability and Statistics for Engineering and the Sciences, Brooks/Cole Publishing Company, 3re ed., p. 262-3, and p. 334-5. See claim 4 for motivation analysis above because claim 6 is rejected under the same motivation rationale as claim 4 described above.

25. Claims 7, 8, 9, 13, 14, 15, 16, 16, 21, 22, 23, 26, 27, 28, and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Lear, Schrage, and Charnley as applied to claim 3, and further in view of Roenfeldt and Cooley (hereinafter Roenfeldt) who expound on ranking of investments. See Roenfeldt and Cooley, Ranking Investments by Risk and Return, July-August 1977, Atlanta Economic Review, all pages.

26. Here, **as to claim 7**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose selecting the group for investment based on variances in the population distribution from that of a normal distribution of said past investment performance around the mid-point of investment performance for the population as proposed in the Application. On the other hand, Schrage teaches or discloses that selecting the group for investment based on variances. See Schrage, page 4.

However, neither Lear nor Schrage teaches or discloses assigning each of said equal-sized population areas with a rank according to population size...and...selecting as proposed in the Application. On the other hand, Roenfeldt teaches or discloses a method for ranking investments based on risk and return as done in the Application. See Roenfeldt and Cooley, Ranking Investments by Risk and Return, July-August 1977, Atlanta Economic Review, all pages.

The prior art of Lear, Schrage, Charnley, and Roenfeldt are "analogous" or "pertinent" because Lear, Schrage and Charnley are in the same field of endeavor as the patent application because Lear, Schrage and Charnley are in the field of portfolio selection.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lear, Schrage, etc. to include ranking in view of Roenfeldt because Roenfeldt indicates how ranking investments based on risk and return points to selecting the proper investments. See Roenfeldt and Cooley, Ranking

Investments by Risk and Return, July-August 1977, Atlanta Economic Review, all pages. It would have been obvious to one skilled in the art to use the improved ranking system to refine in the system of Lear because the ranking system gives insight as to which investments to purchase.

27. Here, **as to claim 8**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose said step of selecting for investment a group of funds is from a composite area formed from at least two of said equal-sized population areas having a high rank relative to all ranks assigned as in the Application.

On the other hand, Charnley teaches or discloses that selecting equal size populations was in the prior as shown in Figure 7 of the Application. See claim 7 for motivation analysis because claim 8 is rejected under the same rationale as claim 7 described above.

28. Here, **as to claim 9**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose said step of assigning each of said equal-sized population with a rank is executed according to proximity to the center point of an asset class for average return and returns variance in descending order from closest to furthest from said center point as in the Application.

On the other hand, Roenfeldt teaches or discloses ranking of investments. See Roenfeldt and Cooley, Ranking Investments by Risk and Return, July-August 1977,

Atlanta Economic Review, all pages. See claim 7 above for motivation analysis because claim 9 is rejected under the same motivation rationale as claim 7 described above.

29. Here, **as to claim 13**, Lear teaches or discloses (a) creating a population distribution representative of the past investment performance ... in a two-dimensional spatial distribution with one dimension being investment returns and the other dimension being the risk of those returns. See Lear; Column 4, Line 25. However, Lear does not teach or disclose (b) identifying variances in the population density as proposed in the Application. On the other hand, Schrage teaches or discloses that selecting the group for investment based on variances. See Schrage, page 4.

Furthermore, Charnley teaches or discloses (c) measuring the population of said book-valued funds in each of said equal-sized areas because Charnley indicates in Fig. 7 that dividing up the population was prior art. See Application Drawings Fig 7. Finally, Roenfeldt teaches or discloses (d) ranking the equal-sized areas ...and (e) selecting. See Roenfeldt and Cooley, Ranking Investments by Risk and Return, July-August 1977, Atlanta Economic Review, all pages. The prior art of Lear, Schrage, and Roenfeldt are "analogous" or "pertinent" because all the art is in the same field of portfolio selection.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lear to include a variance analysis in view of Schrage because variance is just the square of the standard deviation and stills allows consideration of risk since the need to incorporate risk in any evaluation of investment decisions as stated by Roenfeldt. See Roenfeldt and Cooley, Ranking Investments by

Risk and Return, July-August 1977, Atlanta Economic Review, page 14 and Jay L. Devore, Probability and Statistics for Engineering and the Sciences, Brooks/Cole Publishing Company, 3re ed., p. 141-2 (for mathematical definition of standard deviation and variance). It would have been obvious to one skilled in the art to use the improved Markowitz analysis to incorporate risk consideration in the system of Lear because Lear would need or want the feature of risk evaluation with either variance or standard deviation.

30. Here, **as to claim 14**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, and Roenfeldt because that claim repeats the same language as claim 2. Therefore, claim 14 is rejected under the same rationale as claim 2 described above.

31. Here, **as to claim 15**, Lear teaches or discloses said population distribution is a display of investment returns, ..., as a function of investment risk. See Lear; Column 4, Line 25. However, Lear does not teach or disclose returns, denominated as the covariance as proposed in the Application. On the other hand, Schrage teaches or discloses that returns, denominated as the covariance. See Schrage, page 4. See claim 13 for motivation analysis because claim 15 is rejected under the same rationale as claim 13 described above.

32. Here, **as to claim 16**, Lear teaches or discloses said population distribution is a display of investment returns, ..., as a function of investment risk. See Lear; Column 4, Line 25. However, Lear does not teach or disclose sectioning said population distribution into from four to twenty-five of said equal-sized areas. On the other hand,

Charnley teaches or discloses in Figure 7 the division of the population into equal areas as prior art. See claim 13 for motivation analysis because claim 16 is rejected under the same rationale as claim 13 described above.

33. Here, **as to claim 21**, Lear teaches or discloses said population distribution is a display of investment returns, ..., as a function of investment risk. See Lear; Column 4, Line 25. However, Lear does not teach or disclose said step of sectioning is dividing said population distribution into sixteen equal-sized areas. On the other hand, Charnley teaches or discloses sectioning into sixteen equal-sized areas as prior art in Figure 11. See claim 13 for motivation analysis because claim 16 is rejected under the same rationale as claim 13 described above.

34. Here, **as to claim 22**, Lear teaches or discloses said population distribution is a display of investment returns, ..., as a function of investment risk. See Lear; Column 4, Line 25. However, Lear does not teach or disclose wherein said selecting comprises combining the population of two or more of the most populated areas so ranked to form a single composite selected area. On the other hand, Roenfeldt teaches or discloses combining areas and ranking. Roenfeldt and Cooley, Ranking Investments by Risk and Return, July-August 1977, Atlanta Economic Review, all pages. See claim 13 for motivation analysis because claim 22 is rejected under the same motivation rationale as claim 13 described above.

35. Here, **as to claim 23**, Lear teaches or discloses said population distribution is a display of investment returns, ..., as a function of investment risk. See Lear; Column 4, Line 25. However, Lear does not teach or disclose combining a population of two or

more areas ranked as closest to a center point for asset class average returns and returns variance into one composite selected area. On the other hand, Roenfeldt teaches or discloses combining ranked areas. Roenfeldt and Cooley, Ranking Investments by Risk and Return, July-August 1977, Atlanta Economic Review, all pages. See claim 13 above for motivation analysis because claim 22 is rejected under the same motivation rationale as claim 13 described above.

36. Here, **as to claim 26**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, Roenfeldt and Schirripa because that claim repeats the same language as claim 10. Therefore, claim 26 is rejected under the same rationale as claim 10 described above.

37. Here, **as to claim 27**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, Roenfeldt and Schirripa because that claim repeats the same language as claim 10. Therefore, claim 27 is rejected under the same rationale as claim 10 described above.

38. Here, **as to claim 28**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, Roenfeldt and Schirripa because that claim repeats the same language as claim 12. Therefore, claim 28 is rejected under the same rationale as claim 12 described above.

39. Here, **as to claim 29**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, Roenfeldt and Schirripa because that claim repeats the same language as claim 12. Therefore, claim 29 is rejected under the same rationale as claim 12 described above.

40. Claims 10, 17 - 20, 24, 25, and 30 - 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previously mentioned art. The motivation analysis is essentially the same as above and eliminated for brevity.

41. Here, **as to claim 10**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose wherein said step of selecting of a group of funds for investment is from a composite area formed from at least two of said equal-sized population areas having a high rank relative to all ranks assigned as proposed in the Application. On the other hand, Alcaly teaches or discloses selecting the group from the population. See Alcaly, Co with the patent application number US 2002/0007329 A1 (hereinafter Alcaly) Claim 1.

42. Here, **as to claim 17**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, and Roenfeldt because that claim repeats the same language as claim 4. Therefore, claim 17 is rejected under the same rationale as claim 4 described above.

43. Here, **as to claim 18**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, and Roenfeldt because that claim repeats the same language as claim 5. Therefore, claim 18 is rejected under the same rationale as claim 5 described above.

44. Here, **as to claim 19**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, and Roenfeldt because that claim repeats the same language as

claim 6. Therefore, claim 19 is rejected under the same rationale as claim 6 described above.

45. Here, **as to claim 20**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, and Roenfeldt because that claim repeats the same language as claim 1. Therefore, claim 20 is rejected under the same rationale as claim 1 described above.

46. Here, **as to claim 24**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose investing in those funds that populate said single composite selected area as proposed in the Application. On the other hand, Schirripa teaches or discloses investing in an area. See Schirripa with the patent number US 6,282,520 B1 (hereinafter Schirripa) Column 5, Lines 30 - 35.

47. Here, **as to claim 25**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, Roenfeldt and Schirripa because that claim repeats the same language as claim 24. Therefore, claim 25 is rejected under the same rationale as claim 24 described above.

48. Here, **as to claim 30**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose creating an investment portfolio by holding funds in said single composite selected area for at least thirty-six months as proposed in the Application. On the other hand, Devore teaches or discloses obtaining

an adequate sample size, which in this situation, would be 36 months. See Devore, pages 334-5.

49. Here, **as to claim 31**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, Roenfeldt Schirripa and Devore because that claim repeats the same language as claim 30. Therefore, claim 31 is rejected under the same rationale as claim 30 described above.

50. Here, **as to claim 32**, Lear teaches or discloses determining the past investment performance of the funds in the population. See Lear; Column 2, Line 50; Column 4, Line 35. However, Lear does not teach or disclose (i) selling funds i...; and (ii) using proceeds of said selling to further invest in a group of funds as proposed in the Application. On the other hand, Friedman teaches or discloses the concept of "rollover" whereby an individual sells an investment and reinvests in another institution. See Friedman, pages 601 (the definition of ROLLOVER).

51. Here, **as to claim 33**, is rejected under 103 as being anticipated by Lear, in view of Schrage, Charnley, Roenfeldt, Schirripa, Devore and Friedman because that claim repeats the same language as claim 32. Therefore, claim 33 is rejected under the same rationale as claim 32 described above.

Double Patenting

52. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

53. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

54. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

55. Claims 1 through 33 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/777,313, 10/777,312, 10/604699, 10/604,711, 10/605,293, 10/910,828. Although the conflicting claims are not identical, they are not patentably

distinct from each other because they both disclose a commodity pool with equity interest being sold as stock of the pool. Please file required disclaimers to overcome this rejection.

Conclusion

56. The current patent application does not meet the stringent requirements of a U.S. utility patent because of the 35 U.S.C. 103 and 112 statutory requirements. Business method patent applications are required to undergo strict quality control and quality review. It is doubtful that the current patent application in its present form would meet the standards under on 35 U.S.C. 103 and 112. An alternative recourse may be found with copyright protection from the copyright office.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Rioux whose telephone number is (571) 272-7326. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

JAMES P. TRAMMELL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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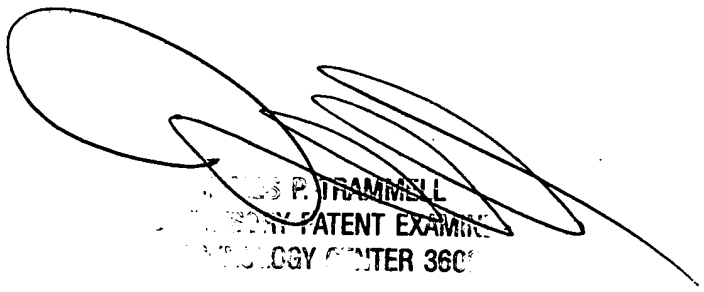

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EXAMINER	
ART UNIT	PAPER
	20070227

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Requirement for Information Under 37 C.F.R. § 1.105

The following is a quotation of the first paragraph of 35 U.S.C. 112:
Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application..

1. The information is required to determine the extent of use, sale, fees and/or offer to sell services specified in claims 1 -33 because disclosure on the applicant's website regarding claims 11, 12, 26 - 29 indicating that those claims were in public use as part of the inventor's business. See James Charnley, Water Street Advisers Inc., ADV Part 2, (visited Mar. 3, 2007) ,http://www.wtrstr.com.htm> (specifically Schedule F of Form ADV, 06/16/06, p. 8-9).
2. In response to this requirement, please provide information regarding 1.) the extent of use, sale, advertisement, fees, and/or any offer to sell services or licenses or software of the methods, systems, techniques, analysis, etc. claimed in all patent applications with the clients of the inventor, James Charnley and/or agents of Mr. Charnley and/or of Water Street Advisers, Inc. and 2.) the exact dates of all use and/or sale and/or advertisement and/or fees and/or offer to sell of services or licenses of the disclosed invention or embodied software. Also, please provide the nature of the use, sale, fees, advertisement and/or offer to sell services or licenses or software as well as all relevant dates. Also, please provide information regarding the public access to the use, sale, advertisement, fees and/or offer to sell services or licenses or software as well as any confidentiality obligations imposed is requested with the relevant dates.
3. Information is required regarding the mathematical definitions and calculations performed in the disclosed invention because no equations or calculations are enumerated in the specification or the claims which leaves the examiner unable to divine the exact origins or nature of the exact mathematical operations taking place in the enumerated claims.
4. In response to this requirement, please provide the source of the equations recited in claims 1 – 33. Please indicate if the equations were derived from first principles, and if so, please show a complete proof of the equation derivations as required for complete disclosure. Please indicate if the equations were obtained from reference or text books, and if so, please cite and provide copies of those reference or text books with the relevant dates. Furthermore, in response to this requirement, please provide a listing of all patents, publications, software or other information (similar to PTO Form 1449 – Information Disclosure Statement) and a concise statement of relevance of the reference for each reference cited with the relevant dates.
5. Information is required of any use of the claimed invention because of the statutory restrictions on prior use of inventions. See 35 U.S.C. 102.
6. In response to this requirement, please provide an identification of any use, sale, advertisement, fees and/or offers to sell

services or licenses or software of the claimed invention, i.e. the use of a "Method for Selecting Investments in Book-Value Collective Investment Funds" and embodied computer software use in public or in private settings and the applicable dates of use.

7. The information is required to the source of inventorship because Schedule F of Form ADV on inventor's website indicates that a significant amount of work was appropriated from Benjamin Graham's discipline of "value-investing" which were reflected in claims 11, 12, and 26 – 29 and never disclosed in the application or information disclosure statement (IDS).

8. In response to this requirement, please provide 1.) the names of any of any individuals and/or entities who have contributed to the claimed subject matter with 2.) the relevant dates of those contributions, and 3.) provide a copy of all information provided by Benjamin Graham.

9. The fee and certification requirements of 37 C.F.R. § 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 C.F.R. § 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 C.F.R. § 1.105 are subject to the fee and certification requirements of 37 C.F.R. § 1.97.

10. In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

11. The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

A complete response to the enclosed Office action must include a complete response to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action, which is THREE months.